

Commonwealth of Kentucky
Division for Air Quality
PERMIT STATEMENT OF BASIS

MINOR REVISION TO THE
CONDITIONAL MAJOR/SYNTHETIC MINOR PERMIT NO. F-04-028 (REVISION 1)
The C. W. Zumbiel Company
2339 Harris Av. Norwood, OH 45212
JULY 21, 2005
FROUGH SHERWANI, REVIEWER
AI #: 50899
PLANT I.D. # 021-015-00146

Revision 1 (Minor Revision):

On July 11, 2005, the source has applied to the Division for Air Quality to construct two flexographic presses, one rotogravure press and nine wash tanks for equipment clean up. Also, the word "as applied" was added to the equation listed under the Compliance Demonstration Method on page 6 of 23 of the permit Number F-04-028 (Revision 1)

Emission Point	2 (Press 70)	10-Color Flexographic Press
	MP1:	Nine (9) Ink Application Station
	MP2:	Extender (mixed with ink)
	Flexo Extender	
	Aquasan Extender	
	MP3:	One Overcoat Varnish application station
		(Roll Coating, mixed with ink)
	MP4:	Topoff Blend (mixed with ink)
	MP5:	Misc. Ink Additives (mixed with ink)
	MP6-MP7	Two (2) Drying Ovens (0.8 mmBTU/hr each)
	MP8	Pre Heater (0.8 mmBTU/hr)
Emission Point	3 (Press 71)	8-Color Rotogravure Press
	MP1:	Seven (7) Ink Application Station
	MP2:	Extender (mixed with ink)
	Flexo Extender	
	Aquasan Extender	
	MP3:	One Overcoat Varnish application station
		(Roll Coating, mixed with ink)
	MP4:	Topoff Blend (mixed with ink)
	MP5:	Misc. Ink Additives (mixed with ink)
	MP6-MP11	Six (6) Drying Ovens (0.87 mmBTU/hr each)
	MP12-MP13	Two (2) Drying Oven (1.2 mmBTU/hr)

Emission Point	4 (Press 72)	8-Color Flexographic Press
	MP1:	Seven (7) Ink Application Station
	MP2:	Extender (mixed with ink)
	Flexo Extender	
	Aquasan Extender	
	MP3:	One Overcoat Varnish application station
		(Roll Coating, mixed with ink)
	MP4:	Topoff Blend (mixed with ink)
	MP5:	Misc. Ink Additives (mixed with ink)
	MP6-MP11	Eight (8) Drying Ovens (0.8 mmBTU/hr each)

Emission Point 5 Nine (9) Wash tanks for equipment cleanup

Existing Source:

SOURCE PROCESS DESCRIPTION:

The C. W. Zumbiel Company has applied for a permit to construct and operate a commercial printing press. Once constructed, the facility will have:

- (a) 8-color in-line flexographic printing press with 7 ink applicators and one coating applicator;
- (b) 8 natural gas-fired drying ovens at 0.618 MMBtu/hr each and;
- (c) In-line rotary die cutter.

Emission Point:	1(Press 73)	8-Color Flexographic Press
	MP1	Seven (7) Ink Application Station
	MP2	Extender
	MP3	One (1) Overcoat Varnish
		Application Station
	MP4	Topcoat Blend
	MP5	Misc. Ink Additives
	MP6	Clean-Up
	MP7-MP14	Eight (8) Drying Ovens
		(Natural Gas)

COMMENTS:

Emission factors and their source:

AP – 42 5th edition, and mass balance (MSDS) are used for the emission factors for PM, VOC and HAPS.

Applicable regulation:

1. 401 KAR 59:210. New fabric, vinyl and paper surface coating operations.
2. 401 KAR 59:212. New graphic arts facilities using rotogravure and flexography
3. 401 KAR 52:030. Federally-enforceable permits for nonmajor sources.
4. 401 KAR 63:021, Existing sources emitting toxic air pollutants

EMISSION AND OPERATING CAPS DESCRIPTION:

1. The source has accepted a facility-wide cap on annual VOC emissions of no more than 45 tons per rolling 12-month period including emission from insignificant activity. Compliance with this allowable will be demonstrated by record keeping and emissions estimating methodology specified in the terms and conditions of the permit.
2. The source has accepted a facility-wide cap on annual individual HAP emission of no more than 9 tons per rolling 12-month period including emission from insignificant activity. Compliance with this allowable will be demonstrated by record keeping and emissions estimating methodology specified in the terms and conditions of the permit.
3. The source has accepted a facility-wide cap on annual combined HAPS emissions of no more than 10.0 tons per rolling 12-month period including emission from insignificant activity. Compliance with this allowable will be demonstrated by record keeping and emissions estimating methodology specified in the terms and conditions of the permit.
4. The affected facility shall be exempt from Section 3 of 401 KAR 59:210 regulation if the VOC content of the coating is less than 0.35 kg/l of coating (two and nine-tenths (2.9) lb/gal), excluding water or exempt solvent or both, delivered to the applicators associated with the coating line.
5. The affected facility shall be exempt from Section 3 of 401 KAR 59:212 regulation if the printing systems utilize a waterborne ink whose volatile portion consists of seventy-five (75) volume percent water and twenty-five (25) volume percent organic solvent (or a lower VOC content) in all printing units.

PERIODIC MONITORING:

This permit requires monthly records of material usage and emissions to demonstrate compliance with the 12 months emission limitations.

CREDIBLE EVIDENCE:

This permit contains provisions which require that specific test methods, monitoring or record keeping be used as a demonstration of compliance with permit limits. On February 24, 1997, the U.S. EPA promulgated revisions to the following federal regulations: 40 CFR Part 51, Sec. 51.212; 40 CFR Part 52, Sec. 52.12; 40 CFR Part 52, Sec. 52.30; 40 CFR Part 60, Sec. 60.11 and 40 CFR Part 61, Sec. 61.12, that allow the use of credible evidence to establish compliance with applicable requirements. At the issuance of this permit, Kentucky has not incorporated these provisions in its air quality regulations.